

Claims

1. A method of cooling air in outdoor venues comprising the steps of:
causing a flow of air in an open space of the outdoor venue,
spraying water into the flow of air by pumping the water at high pressure through
at least one nozzle to disperse the water in very small droplets, and
selectably spraying the water cyclically as a function of time in response to
perceived ambient temperature and humidity.
2. The method of claim 1 wherein the droplet size of the very small droplets
average substantially 10-25 microns.
3. The method of claim 1 wherein the very small droplets evaporate to a gaseous
state within one second of ejection from the nozzle.
4. The method of claim 1 wherein the flow of air is periodically cycled on and off
and the spraying of water is cycled on during the on cycle of the air.
5. An apparatus for cooling air in an outdoor venue comprising a means for causing
a flow of air in the outdoor venue,
at least one nozzle positioned to direct a spray of water into the flow of air,
a high pressure electric water pump in communication with a source of water and
a water conduit connecting the pump to the nozzle, and
a selectable controller in electric communication with the water pump, the
selectable controller adapted to timewise cycle the pump on and off periodically.

6. The apparatus of claim 5 wherein the means for causing a flow of air comprise at least one fan, said at least one nozzle attached to the fan.

7. The apparatus of claim 5 including means to cycle the air flow on and off and means to coordinate the on and off cycle of the pump with the on and off cycle of the means to cycle the air flow.

8. The apparatus of claim 5 wherein the means for causing a flow of air provides a continuous flow of air in the outdoor venue.

9. The apparatus of claim 8 wherein the selectable controller can selectably provide for continuous spray of water or a full cycle of about fifteen seconds.

10. The apparatus of claim 8 wherein the selectable controller can provide a pump on timewise period differing from the pump off timewise period.

11. The apparatus of claim 8 wherein the water conduit is approximately one-sixteenth inches in inside diameter.

12. The apparatus of claim 5 comprising a plurality of means for causing a flow of air and a plurality of nozzles positioned to direct sprays of water into each of the plurality of means for causing a flow of air.

13. The apparatus of claim 12 including a plurality of water conduits connecting the pump to the plurality of nozzles.

14. A method of cooling air in an outdoor venue comprising the cyclic injection of water droplets into a flow of air directed into the outdoor venue, said water droplets sized to evaporate within one second after injection.

15. The method of claim 14 wherein the water droplet sizes average substantially

10-25 microns.

16. The method of claim 14 wherein the cyclic injection of water droplets is timewise adjustable.

17. The method of claim 16 wherein the cyclic on-time injection of water droplets is adjustable relative to the cyclic off-time non-injection of water droplets.